



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2017-10-08-01 Date: 10-10-17
 Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.
 Address : Byatarayanapura Sub division, BBMP, Bangalore.
 Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.
 Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010
 Customer's Reference : BBMP/EE/BTP/WO/26/2017-18
 Source of Sample : Sample supplied by Agency
 Sample Condition : Satisfactory
 Date of Receipt : 08-10-17
 Sample ID No : 2017-10-08-01-01
 Sample Type : Birla Super 53grade
 Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
 IS 4031 (Part 1,2 3,4,5, 6,11):1988
 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4
 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5
 IS 4031 Part 3, Determination of Soundness, Clause 5, Clause 6
 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5
 IS 4031 Part 11, DETERMINATION OF DENSITY , Clause 6

Date of test : 09-10-17

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.24	—
2	Finess by Air permeability method (m ² /kg, Min)	273.6	225m ² /kg, Min
3	Density (gm/cc)	3.13	—
4	Standard Consistency (%)	28.0%	Not specified
5	Initial Setting time	175 minutes	Not less than 30 minutes
6	Final Setting time	270 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

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Samples will be disposed after 30 days from the date of issue of test certificate



FOR CIVIL Pro.

R. Rudraprasad

R RUDRAPRASAD
Authorized Signatory
Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2017-10-08-01 Date: 06-11-17
 Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.
 Address : Byatarayanapura Sub division, BBMP, Bangalore.
 Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.
 Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010
 Customer's Reference : BBMP/EE/BTP/WO/26/2017-18
 Source of Sample : Sample supplied by Agency
 Sample Condition : Satisfactory
 Date of Receipt : 08-10-17
 Sample ID No : 2017-10-08-01-01
 Sample Type : Birla Super 53grade
 Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
 IS 4031 Part 6, Determination of Compressive Strength, Clause 6
 Date of test : 09-10-17

Compressive Strength			
Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	29.0N/mm ²	Not less than 27 N/mm ²
2	7 Days	38.5N/mm ²	Not less than 37 N/mm ²
3	28 Days	56.5N/mm ²	Not less than 53 N/mm ²

Note:

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 Samples will be disposed after 90 days from the date of issue of test certificate

Assistant Executive Engineer
 Kodigehalli Sub Division
 Yelahanka Zone, B.B.M.P.,
 Bangalore.
 A-58



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 Authorized Signatory
 Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2017-10-08-01 Date: 11-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample condition : Satisfactory

Date of Receipt : 08-10-17

Sample ID No : 2017-10-08-01-02(a)

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2011
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption
IS 2386 Part 4: Mechanical Properties

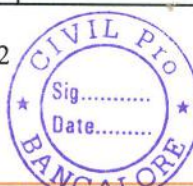
Date of test : 08-10-17

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	374	374	2.5	97.5	90-100
3	20 mm	5728	6102	40.7	59.3	30-70
4	10 mm	4773	10875	72.5	27.5	10-35
5	4.75 mm	3464	14339	95.6	4.4	0-5
6	Pan	661	15000	100.0	0	---

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TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-02(a)

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	10.9	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.6	
3	Specific Gravity	2.68	—
4	Bulk Density(Loose) (Kg/l)	1.53	—
5	Bulk Density(Compacted) (Kg/l)	1.57	—
6	Water Absorption(%)	0.2	—

Note:

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Samples will be disposed after 30 days from the date of issue of test certificate

AW-8
Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.



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R RUDRAPRASAD

Authorized Signatory

Technical Manager

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TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2017-10-08-01 Date: 11-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 08-10-17

Sample ID No : 2017-10-08-01-02(b)

Sample Type/ Size : 20mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2011
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption
IS 2386 Part 4: Mechanical Properties

Date of test : 08-10-17

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	386	386	7.7	92.3	90-100
3	10 mm	2739	3125	62.5	37.5	25-55
4	4.75 mm	1678	4803	96.1	3.9	0-10
5	Pan	197	5000	100	0	-

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TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-02(b)

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	12.7	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	11.6	
3	Specific Gravity	2.56	—
4	Bulk Density(Loose) (Kg/l)	1.52	—
5	Bulk Density(Compacted) (Kg/l)	1.58	—
6	Water Absorption(%)	0.25	—
7	Aggregate crushing Value(%)	23.9	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	22.2	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

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AF 108
Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.



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Authorized Signature
Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2017-10-08-01 Date: 11-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 08-10-17

Sample ID No : 2017-10-08-01-03

Sample Type : Fine Aggregate

Reference to BIS codes : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption

Date of test : 08-10-17

Total weight taken : 1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	48	48	4.8	95.2	90-100	90-100	90-100	95-100
3	2.36 mm	184	232	23.2	76.8	60-95	75-100	85-100	95-100
4	1.18 mm	208	440	44.0	56.0	30-70	55-90	75-100	90-100
5	600 micron	168	608	60.8	39.2	15-34	35-59	60-79	80-100
6	300 micron	197	805	80.5	19.5	5-20	8-30	12-40	15-50
7	150 micron	109	914	91.4	8.6	0-10	0-10	0-10	0-15
8	Pan	86	1000	100.0	0.0	---	---	---	---

Result : The tested Sample Conforms to Grading Zone II

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(Signature)



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Certificate No.: TC-5548

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-03

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	2.68	—
2	Specific Gravity	2.58	—
3	Material finer than 75 micron(%)	5.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

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AswS
Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.



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Authorized Signatory
Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID : CP-2017-10-08-01 Date: 11-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 08-10-17

Sample ID No : 2017-10-08-01-04(a)

Sample Type/Size : Solid concrete blocks of size (400X200X200)mm

Reference to BIS codes : IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification
Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex - C Clause 9.3 and 10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)

Date of test : 08-10-17

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10 ⁶	Avg. Block Density in (Kg/cum)	As per IS 2185 (Part 1):2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm ³)	Kg	Kg/m ³	Kg/m ³	
1	402	200	202	16241	32.640	2009.8	1988.6	Not less than 1800Kg/m ³
2	400	201	201	16160	31.820	1969.0		
3	401	202	200	16200	32.19	1987.0		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg. Water Absorption	As per IS 2185 (Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.730	31.870	5.84	5.58	Shall not be more than 10% by mass
2	32.580	30.860	5.57		
3	32.410	30.770	5.33		

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Certificate No.: TC-5548

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-04(a)

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	401	203	202	Length : $\pm 5\text{mm}$ Breadth : $\pm 3\text{mm}$ Height : $\pm 3\text{mm}$
2	402	201	201	
3	403	203	200	
4	401	200	202	
5	402	201	200	
6	401	200	201	
7	402	201	202	
8	403	202	200	
9	400	203	203	
10	401	201	202	
11	402	200	201	
12	402	201	200	
13	400	203	203	
14	401	202	201	
15	401	202	201	
16	400	201	200	
17	402	201	203	
18	402	203	201	
19	403	201	202	
20	402	203	200	
Average of 20	402	202	201	

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X. K. Kulkarni

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Certificate No.: TC-5548

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-04(a)

COMPRESSIVE STRENGTH:

Sl. No.	Size of solid block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm ²)	(KN)	N/mm ²	(N/mm ²)
1	401	203	81403	475.9	5.8	5.8
2	402	201	80802	480.6	5.9	
3	403	203	81809	474.9	5.8	
4	401	200	80200	475.9	5.9	
5	402	201	80802	469.8	5.8	
6	401	200	80200	463.3	5.8	
7	402	201	80802	459.9	5.7	
8	403	202	81406	464.6	5.7	

As per IS Requirements (Table 2, Clause 5.1, 5.2 and 9.4)

Compressive strength		
Grade	Minimum average	Minimum Individual units.
C (5.0)	5.00 N/mm ²	4.00 N/mm ²
C (4.0)	4.00 N/mm ²	3.20 N/mm ²

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R RUDRAPRASAD
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Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID : CP-2017-10-08-01 Date: 11-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 08-10-17

Sample ID No : 2017-10-08-01-04(b)

Sample Type/Size : Solid concrete blocks of size (400X100X200)mm

Reference to BIS codes : IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification
Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex - C Clause 9.3 and 10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)

Date of test : 08-10-17

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10 ⁶	Avg. Block Density in (Kg/cum)	As per IS 2185 (Part 1):2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm ³)	Kg	Kg/m ³	Kg/m ³	
1	400	100	201	8040	16.160	2010.0	1983.2	Not less than 1800Kg/m ³
2	402	101	202	8202	16.190	1974.0		
3	401	102	203	8303	16.320	1965.5		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg. Water Absorption	As per IS 2185 (Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	17.260	16.370	5.44	5.39	Shall not be more than 10% by mass
2	17.380	16.530	5.14		
3	17.190	16.280	5.59		

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Lab ID : CP-2017-10-08-01
Sample ID No : 2017-10-08-01-04(b)

Date: 11-10-17

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	401	100	201	Length : $\pm 5\text{mm}$ Breadth : $\pm 3\text{mm}$ Height : $\pm 3\text{mm}$
2	400	101	202	
3	402	103	200	
4	403	102	203	
5	401	100	201	
6	400	102	202	
7	402	102	203	
8	403	100	201	
9	401	101	202	
10	400	101	201	
11	401	100	200	
12	402	103	201	
13	402	102	203	
14	400	103	202	
15	401	102	201	
16	402	103	203	
17	403	102	202	
18	401	101	201	
19	400	100	203	
20	401	102	202	
Average of 20	401	102	202	

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Certificate No.: TC-5548

Lab ID : CP-2017-10-08-01

Date: 11-10-17

Sample ID No : 2017-10-08-01-04(b)

COMPRESSIVE STRENGTH:

Sl. No.	Size of solid block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm ²)	(KN)	N/mm ²	(N/mm ²)
1	401	100	40100	182.5	4.6	4.4
2	400	101	40400	178.5	4.4	
3	402	103	41406	183.5	4.4	
4	403	102	41106	178.4	4.3	
5	401	100	40100	176.9	4.4	
6	400	102	40800	174.6	4.3	
7	402	102	41004	173.9	4.2	
8	403	100	40300	181.3	4.5	

As per IS Requirements (Table 2, Clause 5.1, 5.2 and 9.4)

Compressive strength		
Grade	Minimum average	Minimum Individual units.
C (5.0)	5.00 N/mm ²	4.00 N/mm ²
C (4.0)	4.00 N/mm ²	3.20 N/mm ²

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

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Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.



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R. Rudraprasad
Authorized Signatory
Technical Manager

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

CP/TF/01

TEST RESULTS OF STEEL

Lab ID : CP-2017-10-11-04 Date: 13-10-17
Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.
Address : Byatarayanapura Sub division, BBMP, Bangalore.
Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.
Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010
Customer's Reference : BBMP/EE/BTP/WO/26/2017-18
Source of Sample : Sample supplied by Agency
Sample Condition : Satisfactory
Date of Receipt : 11-10-17
Sample ID No : 2017-11-10-04-01
Sample Type : JSW
Reference to BIS codes : IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012.
Date of test: : 11-10-17

Sl.No	Identification of sample	Grade of the sample	Diameter of the steel bar	Weight of the sample	Yield stress	Tensile strength	Elongation	Bend test	Rebend test
			(mm)	(kg/m)	(N/mm ²)	(N/mm ²)	(%)		
1	JSW	Fe500	8	0.393	540	673	20.0%	Satisfactory	Satisfactory
2	JSW	Fe500	10	0.614	566	684	20.0%	Satisfactory	Satisfactory
3	JSW	Fe500	12	0.885	587	695	19.0%	Satisfactory	Satisfactory

Note:

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Assistant Executive Engineer
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CP/TF/01

TEST REPORT OF PRECAST COVER SLAB

Lab ID : CP-2017-11-11-04 Date: 14-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 11-10-17

Sample ID No : 2017-10-11-04-02

Sample Type /Size : Precast Cover Slab

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete

Date of test : 11/10/2017

Sl. No.	Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
		(mm)	(mm)	(mm)	(Sq.mm)	(KN)	(N/mm ²)	(N/mm ²)	(N/mm ²)
1	Cover Slab-1	100.36	200.37	1.906	7909	139.9	17.7	16.5	20.6
2	Cover Slab-2	100.72	200.41	1.915	7966	142.3	17.9	16.6	20.8
3	Cover Slab-3	100.37	200.54	1.922	7911	147.5	18.6	17.3	21.7

Note:

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Assistant Executive Engineer
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CP/TF/01

TEST REPORT OF CEMENT CONCRETE KERB STONE

Lab ID : CP-2017-11-11-04 Date: 14-10-17

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 11-10-17

Sample ID No : 2017-10-11-04-03

Sample Type /Size : CC Kerb Stone/ 450*200*400mm

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete

Date of test : 11/10/2017

Sl. No.	Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
		(mm)	(mm)	Kg	(Sq.mm)	(KN)	(N/mm ²)	(N/mm ²)	(N/mm ²)
1	A	100.37	200.51	2.864	7911	142.1	18.0	16.7	20.9
2	B	100.23	200.42	2.793	7889	137.2	17.4	17.4	21.7
3	C	100.32	200.19	2.815	7903	135.1	17.1	17.1	21.4

Note:

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Assistant Executive Engineer
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CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2017-10-30-05 Date: 02/11/2017

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 30-10-17

Sample ID No : 2017-10-30-05-01

Customer ID : M25 Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 01/11/2017

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm ²)	Average Compressive Strength (N/mm ²)
1	M25 Concrete	M25	25/10/2017	01/11/2017	150.22 X 150.21 X 150.20	22565	8.324	403.9	17.9	17.9
2	M25 Concrete	M25	25/10/2017	01/11/2017	150.24 X 150.21 X 150.18	22568	8.315	401.7	17.8	
3	M25 Concrete	M25	25/10/2017	01/11/2017	150.18 X 150.10 X 150.21	22542	8.268	408.0	18.1	

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

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Samples will be disposed after 30 days from the date of issue of test certificate

Asst. Exec. Eng.
Byatarayanapura Sub Division
B.B.M.P. Bangalore
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Certificate No.: TC-5548

CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2017-10-30-05 Date: 22/11/2017

Customer : Assistant Executive Engineer, Byatarayanapura Sub division, BBMP, Bangalore.

Address : Byatarayanapura Sub division, BBMP, Bangalore.

Project Name : Improvements to road, drain and footpath in main and cross roads of CQAL layout in Ward no.08 Kodigehalli.

Agency : Executive Engineer, KRIDL, #280, 59th cross road, 17th 'C' main road, 3rd 'Y' block, Rajajinagara, Bangalore-560010

Customer's Reference : BBMP/EE/BTP/WO/26/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 30-10-17

Sample ID No : 2017-10-30-05-02

Customer ID : M25 Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 22/11/2017

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm ²)	Average Compressive Strength (N/mm ²)
1	M25 Concrete	M25	25/10/2017	22/11/2017	149.21 X 149.33 X 150.22	22282	8.145	603.8	27.1	26.7
2	M25 Concrete	M25	25/10/2017	22/11/2017	149.65 X 150.27 X 150.44	22488	8.179	595.9	26.5	
3	M25 Concrete	M25	25/10/2017	22/11/2017	150.46 X 150.47 X 150.68	22640	8.182	597.7	26.4	

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

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Samples will be disposed after 90 days from the date of issue of test certificate

Assistant Executive Engineer,
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